

AI Automation Project: Cost Analysis & Pricing

TO: Client | **FROM:** The Automation Team **DATE:** December 11, 2025 |

PROJECT: AI Appointment Booking Agent

This document provides a transparent cost analysis, detailing our operational expenses and presenting the final recommended pricing structure for the AI Appointment Booking Agent. Our analysis adheres to the 8-Step Cost Analysis Framework.

I. Operational Cost Analysis (Steps 1–7)

1. Workflow Cost Centers (The "What")

The system is structured around three components: The "Brain" (AI Agent), The "Checker" (Calendar), and The "Booker" (Database). The primary variable cost driver is the **OpenAI Chat Model**, specifically due to the **Window Buffer Memory** constantly increasing token usage (words read/written) with every message.

2. Cost Calculation Scenario (Based on 1,000 Chats/Month)

Our calculation is based on a **Standard Clinic Scenario** assuming 1,000 patient conversations per month, totaling approximately **2.5 million tokens** of AI usage.

Cost Category	Breakdown	Monthly Estimate
Infrastructure (AWS)	Self-hosted EC2 server for unlimited workflow runs + Storage/Backups.	$\mathbf{\$22.00}$
AI Consumption	Using the cost-efficient GPT-4o-mini model (2.5M tokens/mo at $\sim \$0.15/\text{1M}$ tokens).	$\mathbf{\$0.38}$
Dedicated Support Retainer	Guaranteed 4 hours/month for troubleshooting, urgent bug fixes, and system optimization. (Calculated at $\$40/\text{hr}$).	$\mathbf{\$160.00}$
Total Operational Cost	<i>(Sum of all running expenses)</i>	$\sim \mathbf{\$182.38}$

II. Client Pricing Strategy & Final Recommendation

1. One-Time Setup Fee (Development Effort)

The initial effort to design, test, and tune the workflow (Step 6) is a one-time charge.

Task	Estimated Base Cost
Workflow Design, Testing, & Prompt Tuning	$\sim \$720$

Recommendation: We will charge a one-time setup fee in the range of $\mathbf{\$750 - \$1,000}$ to cover the base development cost and contingency.

2. Monthly Retainer Quote

We set the final retainer by adding a profit margin (30–50%) to the Total Operational Cost of $\mathbf{\$182.38 / \text{month}}$.

Retainer Component	Price	Justification
Monthly Retainer	$\mathbf{\$240 - \$275 / \text{month}}$	This range fully covers all costs, including the guaranteed 4 hours of monthly support , and provides a competitive profit margin.

III. Risk Management (Step 8: Cost Simulation Tool)

To maintain budget control and ensure transparent billing, we will implement an Automated Cost Tracker.

Function: This tool acts as a "Cash Register," automatically logging the precise **token usage** (from the OpenAI node's usage output) and estimated cost for every AI conversation.

Benefit: This provides us with **real-time budget tracking** and acts as a **safety alarm** to immediately detect and address any system issues that cause excessive, unexpected costs.